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CITY OF RYE
Department of Planning

Memorandum

To: Rye City Council

From: Christian K. Miller, AICP, City Planner

cc: O. Paul Shew, City Manager

Date: February 13, 2004 (Redistributed April 2, 2004)

Subject: Consideration of Parking Meters in the Rye Central Business District

This memorandum provides comments and information to assist the City Council in its deliberation of a proposal to install parking meters in the Rye Central Business District (CBD). City staff responsible for the maintenance, administration, financing or enforcement of parking in the CBD has contributed to the information contained herein. Included in our staff discussion was the City Engineer/Director of Public Works, City Clerk, City Comptroller and Police Commissioner.

Parking Meter Proposal

The Rye City Council is considering a proposal to install meters in the City's five car parks (see Figure 1). The meters would be operational six days a week between 9:00 AM and 6:00 PM and the proposed fee would be $1.00 per hour with a maximum limit of two hours. The proposal also includes changing the current on-street parking restriction on Purchase Street and Elm Place from a one-hour to a 15-minute maximum. No other modifications in existing parking restrictions are proposed, including the installation of on-street meters.

Existing Parking Conditions

The lack of parking has been identified as a problem in the CBD in multiple planning studies since the mid-1940s. Current parking conditions in the City's CBD remain constrained. The City's most recent parking study noted that off-street parking areas

are operating between 90% and 100% of their available capacity during a typical weekday between the hours of 10:00 AM and 4:00 PM[1]. To encourage turnover of these spaces there is a two-hour maximum parking limit, which is enforced by two parking enforcement officers every weekday. On-street parking also has limited availability in the CBD and has a one-hour maximum parking restriction.

The City's five car parks have a total of 488 spaces and are designed to accommodate the parking needs of shoppers and merchants. The City's existing time restrictions and permit structure prohibits commuters from using these parking lots. Commuters, which also compete for parking spaces in the CBD, are limited to the parking areas around the MTA train station and areas north of Theodore Fremd Avenue (see blue areas on Figure 1).

Of the nearly 1,600 parking spaces in the CBD only 130 (or 8%) are metered. These are coin meters with a 12-hour duration located on the north side of Theodore Fremd Avenue and on the east and west sides of First Street. The rate for these meters is $0.25 per hour. They are fully occupied on a typical weekday. These spaces are available on a first-come, first-serve basis and are typically used by commuters unable to obtain a commuter permit from the City. Over 1,000 people are currently on the waiting list for a commuter parking permit.

Existing Parking Revenue

Though the number of meters is limited most people pay for parking in the CBD by obtaining permits from the City. Table 1 provides breakdown of the types and number of permits that are issued and their annual fee. The City collects approximately $330,000 annually from parking permits and $45,000 from meters[2].

Table 1
City of Rye Parking Permits and Fees

Permit Type	*2004 Annual Fee*	*Number of Permits Issued in a Typical Year*
CBD Merchant	$324	325
Non-Resident Commuter	$550	230
Resident Commuter	$336	450
CBD Resident All Day/All Night	$600	50
CBD Resident All Night	$300	50

[1] See *Central Business District Parking Study, City of Rye, New York*, prepared by Buckhurst Fish & Jacquemart, Inc. dated July 2001. A copy of this study is available on the city website at: http://www.ryeny.gov/planning/Reports/CBD%20Parking.pdf

[2] Approximately 50% of the revenue collected from the commuter permits is shared with the MTA, which owns the parking lot.

Parking is currently free in the City's Car Parks and on CBD streets, but is limited to the maximum 2- and 1-hour parking restrictions respectively. Parking enforcement officers enforce this time restriction and other parking violations. In 2003 over $275,000 was generated in parking fines.

Policy Implications of Parking Meters

The most significant policy implication for the City Council to consider if it chooses to install parking meters in the City Car Parks is that those with short-term parking needs (i.e. less than two hours) will now be required to pay during peak parking demand periods. In most cases this means shoppers who currently enjoy the convenience of free parking in the CBD. The loss of this convenience, particularly given Rye's long-term practice of providing free parking, will likely be met with resistance. In addition, some merchants may suggest that charging shoppers will frustrate customers and may adversely impact their businesses.

On the other hand, parking meters can be an effective tool in encouraging parking turnover thereby making more spaces available to shoppers. Meters would be particularly useful in reducing the number of vehicles that violate the two-hour parking restriction in the CBD. Encouraging this turnover was the reason the parking meter was invented by a member of the Oklahoma City Chamber of Commerce in 1935. Parking meters also have the added benefit of generating significant revenue if parking occupancy is high and fees are properly established.

Parking Meter Options

Parking meter technology has had a number of significant advancements in the last 70 years. The following provides a description of each of these technologies and some of their implementation considerations for Rye.

- *Single-Space Meters*. Standard single-space parking meters remain the most widely used metering system. This technology has evolved in some cases to accept coins, bills, credit card and other pre-paid systems such as smart cards or keys. Parking meters are relatively convenient for the user since the pay location is immediately adjacent to the parking space.

  Implementing parking meters requires that a pole or other structure support each meter. In Rye this is an important consideration since these structures do not currently exist. In addition, Car Parks 3 and 4 do not have interior islands or perimeter landscape areas to place these meters. There is limited area to create such islands within these car parks so bollards, guide rails or other similar structural measures would be required to protect the meter from moving vehicles.

These types of structures, however, present significant aesthetic concerns and complicate maintenance and snow removal for DPW staff.

Installing an additional 488 parking meters in the CBD would also significantly increase revenue collection and maintenance demands for City staff. This tripling of the total number of meters would likely require additional staff or reallocation of existing personnel to meet this added responsibility. The redundancy of these systems, however, means that in the event of a malfunction that only that parking space would be impacted by the loss of revenue.

- *Smart Meter*. There is a new application that enhances the traditional parking meter to include detectors to know when a vehicle enters and leaves a parking space. This technology, known as Smart Meter®, can enhance revenue over a traditional meter since it can "zero-out" a meter after a vehicle leaves a space. It also helps prevent meter feeding and can provide for a progressive or tiered rate structure that can increase parking fees for extended parking periods. Installing these systems would have the same implementation considerations as a traditional parking meter; however, each meter also requires a detector in the meter housing and an induction loop that is imbedded beneath the pavement of the parking space. This installation results in added disruptions to pavement.

- *Multi-Space Meters*. Many communities in the U.S. are increasingly using multi-space metering technology, which is already common in Europe. This system involves a centrally located terminal that accepts payment for multiple parking spaces. The two types of multi-space meters are "pay-and-display" and "pay-by-number". Pay-and-display requires the user to pay for the parking space at the terminal and place a proof of payment ticket within the windshield of the vehicle. Pay-by-number requires that each parking space be assigned a number, which is typically identified by a painted number on the pavement or on a sign at each parking space. The user is required to remember the parking space number and pay for that space at a centrally located terminal.

  Pay-and-display is somewhat inconvenient in that it often requires the user to walk from the parking space to the terminal and then return to the vehicle to display the ticket. Enforcement of pay-and-display can also be cumbersome since it requires inspection of the ticket within the windshield of each vehicle. Pay-by-number avoids these concerns, but requires that each space be numbered with signage or a painted surface, which can present aesthetic concerns.

  Both systems accept coins, bills, credit card, smart cards and even payment by cell phone. In addition, unlike traditional meters the pay terminals have other functionality including the ability to pay parking violations, replenish pre-paid cards and produce detailed reports and statistics of parking use. These systems

can also be networked so that the City can be quickly advised of a malfunction and see real-time parking activity over a web-based viewer. Parking enforcement is also added by the use of handheld devices (such as a palm pilot) that quickly identifies spaces that have exceeded permitted time limits.

It is estimated that the City would require between 12 and 15 terminals to conveniently serve all five car parks. Electricity and possibility phone connections would be required to be extended to each terminal; however, these services are available in each car park.

Estimated Revenue

Estimating parking meter revenue can vary greatly depending on occupancy and desired fee. It is reasonable to assume based on detailed studies that parking demand is high and that it will remain so even if meters are installed.

The challenge in anticipating revenue for Rye is that a certain number of spaces will be occupied every weekday by long-term parkers who have merchant or all-day or all-night permits. The City issues roughly 375 of these permits a year and it is assumed that it would continue to do so if meters were installed. Estimating that roughly 50% of these permits would occupy parking spaces during the typical weekday means that of the City's 488 spaces in the Car Parks only 300 would be available for metering[3]. Assuming a fee of $1.00 an hour the City could generate over $400,000 annually based on a 70% daily occupancy (see Table 2). This estimate does not include revenue from Saturdays, which has significantly lower occupancies.

Table 2
City of Rye Estimated Annual Parking Meter Revenue

Number of Spaces	Rate Per hour	Annual Revenue by Percent of Occupancy*				
		100%	90%	80%	70%	60%
300	$0.25	$156,000	$140,400	$124,800	$109,200	$93,600
300	$0.50	$312,000	$280,800	$249,600	$218,400	$187,200
300	$0.75	$468,000	$421,200	$374,400	$327,600	$280,800
300	**$1.00**	**$624,000**	**$561,600**	**$499,200**	**$436,800**	**$374,400**

* *Assumes parking for 8 hours a day, 5 days a week, 52 weeks a year.*

In addition to meter revenue there would likely be additional revenue generated from parking enforcement activities. Currently, the City's two parking enforcement officers

[3] Assume ((488 spaces) – (375 permits x 50% = 188)) = 300 spaces.

chalk tires to assess the length of time a vehicle has been in a parking space. This method has obvious limitations. Metering would likely make parking violations easier to detect and likely increase revenue, though how much is difficult to predict. Other types of parking violations would likely remain unaffected.

Anticipated Costs

Installation and operating costs vary depending on the type of metering system. Since Rye lacks meters today the installed cost for single-space or Smart Meters require the purchase of meters, poles and brackets for mounting and the installation of appropriate protections measures. An added consideration of the single-space or Smart Meter is that 488 meters would be required to be purchased, however, only 300 spaces would be available to generate revenue on a typical weekday. The City would in essence need to pay for close to 200 meters that do not generate revenue because these spaces are occupied by permit-holding merchants and residents. In addition, the collection demands would increase significantly taking away from enforcement opportunities. Currently, DPW staff maintain and repair parking meters, however the tripling of the number of meters would likely require additional funding or resources to accommodate these added responsibilities.

Multi-space meters have a higher per unit cost, but fewer systems are required. The installation of these systems requires purchase of the terminal, the marking and maintenance of spaces, electricity and phone line connections and monthly utility service costs. Maintenance costs of these systems would likely require service contracts or increased staff training.

It is estimated that parking meter installation costs could range between $150,000 and $250,000 for the City's 488 Car Park spaces. Multi-space systems would have similar installed costs, but could likely be somewhat less. It is important to note that all systems and parking meter venders offer financing options that could significantly reduce installation and operating costs. In addition to out-right purchase vendors offer meter rentals, rent-to-own, leasing and revenue sharing options for sometimes as little as one year.

It is reasonable to assume that parking meters in Rye would generate revenue that significantly exceeds anticipated implementation and operating costs. Though some systems have higher cost implications than others, all appear to pay for themselves in as little as two years.

Implementation Considerations and Recommendations

Implementing meters in a currently un-metered market place can face many obstacles and public resistance. The following offers some suggestions that may help provide for a successful implementation strategy.

- *Consider Pay-By-Number Metering Systems.* Based on preliminary research it appears that pay-by-number terminals would be the most appropriate and cost-effective metering system for Rye's CBD for the following reasons:

    - Relative Convenience for User. Though single-space meters offer the convenience of payment close to a parking space their functional options are more limited than a pay-by-number system. Convenience is an important consideration in minimizing the frustrations of new users. The terminals for these systems offer options that meters do not including the ability to pay parking violations, replenishment of pre-paid cards, offer change, etc. The size and configuration of the City's Car Parks also allow for the terminals to be conveniently located to commonly used pedestrian access points. Pay-and-display is considered less desirable since it requires the user to return to the vehicle to display the proof of purchase ticket in the windshield.

    - Easier Collection. Pay-by-number is considered the easiest to collect revenue. It would require visiting up to only 15 terminals for collections as opposed to over 488 collection points required by single-space meters. The City's two parking enforcement officers could accommodate the collection responsibilities required by pay-by-number.

    - Enhanced Enforcement. Pay-by-number has easy parking meter violation detection capabilities with the use of low-cost hand-held detectors. Meters and pay-and-display requires visual inspection of each space to determine violations. Pay-by-number can be set up to address some of the anti-meter feeding strategies offered by Smart Meter.

    - Improved Parking Monitoring. Pay-by-number offers the same statistical reports of parking usage as pay-and-display and Smart Meter. This option has considerable value to the City in monitoring the use of its parking areas. Over time this information could be used to more accurately evaluate parking usage and make adjustments in the City's pricing, permitting or enforcement strategies.

    - Aesthetic and Parking Lot Maintenance Considerations. Pay-by-number offers the least disruption to the City's Car Parks and does not require the installation of multiple poles and meters required by single-space systems. These community character issues and important considerations in the City's CBD. In addition pay-by-number will not significantly impact the existing maintenance practices for the Car Parks such as snow plowing and refuse/litter removal, since parking space numbers can be applied on

the pavement surface. This may limit revenue generation during snow events.

- *Allocate Revenue for CBD Improvements*. The City Council should consider earmarking all or a portion of meter revenue for future improvements in the CBD. The City has identified over $2 million in capital projects required in the CBD. Parking meter revenue could be used to fund these improvements or construct additional parking spaces or structures where deemed feasible. A commitment to revenue allocation to improve parking or other conditions in the CBD could help mitigate some of the frustrations anticipated by merchants and shoppers since they would directly benefit from the increased revenue.

- *Keep Implementation Simple.* Implementation will be more successful if it is limited to installing meters in the City's Car Parks. Other changes in parking policy, such as modifications in the City's permit system or pricing, enforcement practices, or on-street or off-street parking restrictions will present added complications that may require more analysis that could potentially derail implementation. It is therefore recommended that the City not consider changes in on-street parking restrictions at this time. Over time these policies and practices can always be revisited, but do not need to be modified to support the installation of meters.

- *Consider Short-Term Commitments.* Most parking meter vendors offer financing strategies that give the City the ability to make short-term commitments. Rental, leasing or revenue sharing strategies are encouraged since they allow the City the option of trying out meters for a year or two (without adverse financial consequences) before making a longer-term commitment. These financing strategies may mean that revenue potential is somewhat reduced in the first few years, but could result in a more successful program that still exists after an extended period of time.

- *Build Consensus.* The City Council should consider referring the proposal to install meters in the CBD to relevant City Boards and Commission for their review and comment. Members of the community should also be involved in the decision making-process including the Rye Merchant's Association, City Court Judges and other community representatives. Seeking this input may build consensus for the proposal and result in a more successful parking meter program.